GAO Highlights

Highlights of GAO-25-107366, a report to congressional committees

June 2025

FEDERAL HIGHWAYS

DOT Should Improve Communications on Its Cost-Effectiveness Tool for Emissions Reductions

Why GAO Did This Study

Cars, trucks, and other vehicles can emit air pollutants harmful to human health. CMAQ supports projects in areas that do not currently, or did not in the past, meet federal air quality standards for certain air pollutants—carbon monoxide, ozone, or particulate matter. The Infrastructure Investment and Jobs Act provided about $2.7 billion for CMAQ in fiscal year 2025 and authorized about $2.7 billion for fiscal year 2026. While DOT created tools—cost-effectiveness tables and emissions calculators—to help states evaluate CMAQ projects, DOT has not tracked data on the use of these tools by states.

The Infrastructure Investment and Jobs Act includes a provision for GAO to review CMAQ. This report discusses, among other issues, (1) how states have used CMAQ funds, (2) the cost effectiveness of CMAQ projects at reducing emissions, and (3) the extent to which DOT has communicated to states about tools for evaluating CMAQ projects. GAO analyzed DOT project data for fiscal years 2015 through 2023 and DOT financial data for fiscal years 2015 through 2024, the most recent years for which data were available. GAO also interviewed agency officials, reviewed DOT CMAQ documents, and surveyed the 50 states and Washington, D.C. on FHWA's CMAQ tools. GAO assessed DOT's communication of its tools against federal internal control standards.

What GAO Recommends

GAO is recommending that DOT provide ongoing and formal communications about its CMAQ cost-effectiveness tables.

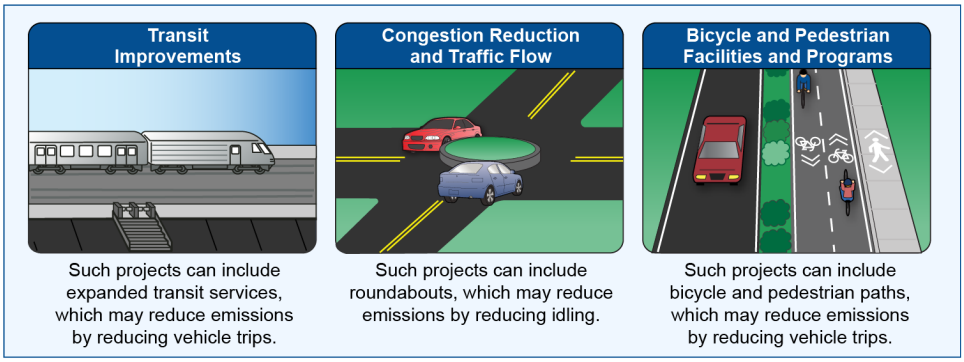
DOT agreed with our recommendation.

For more information, contact Elizabeth Repko at RepkoE@gao.gov.

What GAO Found

Since 1991, the Department of Transportation's (DOT) Congestion Mitigation and Air Quality Improvement Program (CMAQ) has provided funding to states through a statutory formula; this funding is for transportation projects that aim to reduce congestion and improve air quality. GAO found that during fiscal years 2015 through 2023, states spent between $900 million and $1.9 billion annually to start about 700 to 1,200 new CMAQ projects. About 80 percent of projects were for transit improvement, traffic flow improvement, and bicycle and pedestrian projects (see figure).

Examples of Congestion Mitigation and Air Quality Improvement Program Projects



Source: GAO analysis of information from the Federal Highway Administration. | GAO-25-107366

DOT published tables in 2020 to assist states in evaluating the cost effectiveness (in terms of median cost per ton of emissions reduced) of 21 types of CMAQ projects. Using these tables for projects started in fiscal years 2015 through 2023, GAO found that 88 percent of projects, and 82 percent of their costs, were in project types rated by DOT as having mixed or weak cost effectiveness in reducing emissions. States have discretion in selecting projects, and factors, including regional priorities, may affect the cost effectiveness of those projects. For example, a state may use CMAQ funds on bicycle and pedestrian projects to reduce emissions as well as to support other transportation modes in a region, even if such projects may not be as cost effective as projects of other project types in reducing emissions.

While DOT has communicated to states about its tools for evaluating CMAQ projects, it has not done so on an ongoing basis. Federal internal control standards state that agencies should externally communicate information on a timely basis to help stakeholders achieve their objectives. However, most of DOT's communications to states about one of its tools—the cost-effectiveness tables—occurred when DOT last published the tables in 2020. Moreover, about one-third of states that responded to a GAO survey said they or other relevant entities in their states were unaware of these tables. Ongoing communication from DOT about the tables could increase states' awareness and, ultimately, contribute to states selecting CMAQ projects that are more cost effective in reducing emissions of pollutants.